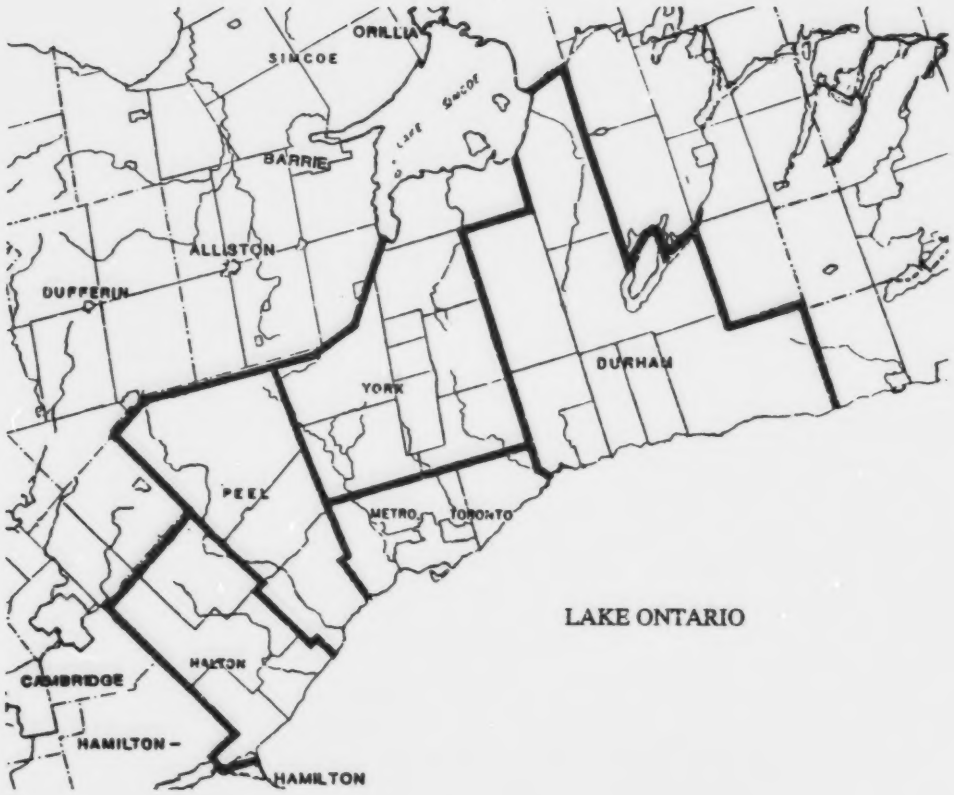
REQUEST FOR EXPRESSIONS OF INTEREST FOR THE DEVELOPMENT OF A COMPREHENSIVE LONG-TERM SOLID WASTE MANAGEMENT SYSTEM FOR THE GREATER TORONTO AREA



SWISC

SOLID
WASTE
INTERIM
STEERING
COMMITTEE

October 1989

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REQUEST FOR EXPRESSIONS OF INTEREST FOR THE DEVELOPMENT OF A COMPREHENSIVE LONG-TERM SOLID WASTE MANAGEMENT SYSTEM FOR THE GREATER TORONTO AREA

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1.0 INTRODUCTION

1.1 Preface

This document has been prepared by the Solid Waste Interim Steering Committee (SWISC) of the Greater Toronto Area (GTA) to request from any organization or group, expressions of interest for the development of a comprehensive, long-term solid waste management system for the Greater Toronto Area.

The purpose of this request is to identify as many alternatives for a waste management system as possible without requiring the respondents to provide specific cost information. It is the intent of SWISC to evaluate the Expressions of Interest with any other alternatives which would meet the goals of SWISC; to issue a Request for Proposals for the preferred alternatives; and to award a contract or contracts on the basis of the proposals received.

The Request for Expressions of Interest document contains the following:

- **Section 1 - Introduction** which includes this **Preface**; a **Respondent's Check Sheet** to assist the Respondent in ensuring that all required information is included in its Response; an **Expressions of Interest Form** to provide a formal statement by the Respondent identifying itself and confirming that it has based the Response on the material submitted with a full understanding of the Request; and a **Glossary of Terms** to assist the Respondent by defining terms used in the Request.
- **Section 2 - Invitation to Submit Expressions of Interest** describes the background to the request; conditions attached; the type of Responses requested; who is eligible to respond; and the objective of SWISC in issuing this document and the principles on which it is based.
- **Section 3 - Instructions to Respondents** describes conditions attached to the Request; how to obtain clarification of any aspect of the Request prior to the Closing Date; and how to enquire for additional information.
- **Section 4 - Background Information to Respondents** provides information on the creation, functions, role and authority of SWISC; the existing waste management systems in the GTA; and the quantity and characteristics of wastes which the Respondent will address in its proposed waste management system. The proposed public

consultation on the Request is also outlined.

- **Section 5 - Environmental Assessment Act and Other Approvals** provides a summary of pertinent legislation to assist the Respondent in preparing a response which will meet the requirements for obtaining subsequent approvals. This section also outlines the respective roles of SWISC and Respondents in complying with legislative requirements.
- **Section 6 - Information on System and Facilities to be Submitted by Respondents** defines the information which will be required for an evaluation of the Responses and describes the role of host communities.
- **Section 7 - Ownership and Operation of System(s) and Facilities** describes the options which SWISC will consider in the evaluation of Responses. The flexibility of Respondents to the various options will be required for the evaluation.
- **Section 8 - Experience of Respondent** requires information on the experience and capability of Respondents with respect to proposed waste management systems.
- **Section 9 - Evaluation of Expressions of Interest** describes the procedures for submission and receipt of Responses and for Evaluation of Responses.

An information package which includes the following documents is available to prospective Respondents on written request to John Farrow, Interim CAO SWISC, 23rd Floor, 145 King Street West, Toronto, Ontario M5H 1V8, for $200.00 to cover printing and handling.

- Consolidation of Existing Solid Waste Management Plans in the Greater Toronto Area, by MacViro Consultants Inc., August 1989.
- Status Report to Member Councils on the Long-term Plan for the Management of Solid Waste in the Greater Toronto Area by SWISC, August 1989.
- A Proposal from the Five Regional Chairmen in the Greater Toronto Area Regarding A Long-term Plan For the Management of Solid Waste, March 1989.
- Public Consultation Program.

All prospective Respondents to the Request for Expressions of Interest are required to register their name and information for communication's purpose with the SWISC office. This is necessary to ensure that all Respondents receive all Addenda to this Request in a timely manner.

DECLARATION OF REGISTRATION

_____ wants to
(firm/organization)

register with the SWISC office as a prospective Respondent to the Request for Expressions of Interest. Please keep us informed of all Addenda to the Request. Our official contact is

Name _____
Title _____
Organization _____

Mailing Address _____
_____
_____
_____

Street Address _____
(for deliveries) _____
_____
_____

Telephone No. (___)___-_____
Fax No. (___)___-_____
Our Courier Company _____
Courier Tel. No. (___)___-_____

For Addenda, we prefer the following means of communication (check one):

[ ] Facsimile only
[ ] Facsimile followed by Canada Post mail delivery
[ ] Facsimile followed by hand delivery by our courier
[ ] Hand delivery by our courier
[ ] Please send me the SWISC Respondent Information Package outlined in the Preface of the Request for Expressions of Interest Document. Enclosed is a cheque or money order payable to "Coopers & Lybrand in Trust for SWISC" for $200 (Canadian) to cover printing and handling.

_____ on behalf of _____
(signature) (firm/organization)

this day _____ in _____.
(date) (City of business)

1.2 Respondent's Check Sheet

BEFORE SUBMITTING YOUR RESPONSE, CHECK THE FOLLOWING POINTS:

Has your response been signed in accordance with the Expressions Of Interest Form? _____

Have you included in your response, the RESPONSES to:

Section 5.1 - Material to be submitted with respect to Environmental Assessment Act Approvals _____

Section 6 - Information on System(s) and Facilities to be submitted by Respondents _____

Section 7 - Ownership and Operation of System(s) and Facilities _____

Section 8 - Experience of Respondent

- o Statement A - Organization and Ownership of Corporation _____
- o Statement B - General Experience of Respondent _____
- o Statement C - Specific Experience of Respondent _____

Have you included the List of Addenda to the Request for Expressions Of Interest? _____

Ensure that your response is in a sealed package clearly marked either:

- "Expression Of Interest for Long-term Solid Waste Management System" or
- "Expression Of Interest for COMPONENTS for a Long-term Solid Waste Management System".

1.3 Expressions Of Interest Form

RESPONSE TO REQUEST FOR EXPRESSIONS OF INTEREST FOR[1]:

☐ - THE PROVISION OF A LONG-TERM SOLID WASTE MANAGEMENT SYSTEM

☐ - THE PROVISION OF COMPONENTS FOR A LONG-TERM SOLID WASTE MANAGEMENT SYSTEM

Respondent .....

place of business (or residing at) .....

and .....

place of business (or residing at) .....

comprising the firm of .....

a company duly incorporated under the laws of .....

and having its head office at .....

herinafter called "the Respondent".

NOTE: The Respondent's name and place of business or residence must be inserted above, and in the case of an unincorporated firm the name and residence of each and every member of the firm must be inserted.

(1) Respondents shall indicate which option is submitted by checking the applicable box. Separate responses shall be made for each option selected.

To: Solid Waste Interim Steering Committee.

I (WE) .....
have carefully examined the Request for Expressions of Interest documents for the Development of a Comprehensive Long-term Solid Waste Management System for the Greater Toronto Area issued by the Solid Waste Interim Steering Committee, hereby submit in accordance therewith the following:

1. LIST OF ADDENDA TO THE REQUEST FOR EXPRESSIONS OF INTEREST ISSUED AFTER CALL FOR EXPRESSIONS OF INTEREST AND TAKEN INTO ACCOUNT BY THE RESPONDENT IN PREPARING ITS RESPONSE.

Addendum No.	Date Issued	Date Received

2. ATTACHED INFORMATION WITH RESPECT TO THE ENVIRONMENTAL ASSESSMENT ACT IN RESPONSE TO SECTION 5.1 OF THE REQUEST FOR EXPRESSIONS OF INTEREST AND INCLUDING:

   - a generic description only of environmental impacts; mitigation measures proposed and net effects on the environment of the proposed system and facilities.

3. ATTACHED INFORMATION ON PROPOSED SYSTEM AND FACILITIES SUBMITTED IN RESPONSE TO SECTION 6 OF THE REQUEST FOR EXPRESSIONS OF INTEREST AND INCLUDING:

   - The Long-term Waste Management Facilities

- Components of the System(s)
- Diversion of Waste
- Host Community(ies) Involvement
- Employment
- Timing

4. ATTACHED INFORMATION WITH RESPECT TO THE OWNERSHIP AND OPERATION OF SYSTEMS AND FACILITIES IN RESPONSE TO SECTION 7.

5. ATTACHED INFORMATION WITH RESPECT TO EXPERIENCE OF THE RESPONDENT IN RESPONSE TO SECTION 8 OF THE REQUEST FOR EXPRESSIONS OF INTEREST AND INCLUDING:

- Statement "A" - Organization and Ownership of Corporation
- Statement "B" - General Experience of Respondent
- Statement "C" - Specific Experience of Respondent

I (We) declare that this response is in all respects fair and without collusion or fraud, and that no member of the Solid Waste Interim Steering Committee and no elected or other public official, is, shall be, or shall become interested, directly or indirectly, as shareholder, partner, surety or otherwise in, or in the performance of the work described in this response, or in any subsequent proposal or contract, or in the supplies, work or business to which it relates, or in any portion of the profits to be used therein, or thereof, or in any of the monies to be derived therefrom except as stated hereunder: (see Section 3.1).

Signature of Witness

Signature of Respondent
and Corporate Seal.
(if available).

1.4 Glossary of Terms

4Rs	the Reduction, Re-use, Recycling and Recovery of materials and energy from wastes prior to disposal.
ADDENDA	any addenda to the Request which may from time to time be issued in writing by SWISC to amend, modify or supplement the Request.
BIDDER	a person submitting a written proposal to SWISC in response to the RFP.
CERTIFICATE OF APPROVAL	with respect to waste disposal, a Certificate of Approval is issued under Part V of the Environmental Protection Act. It is required before a waste management system or waste disposal site or facility can be used, operated, established, altered, enlarged or extended and provides conditional permission to operate a waste disposal site or waste management system.
CHAIRMEN'S PROPOSAL	The document entitled, "A Proposal from the Five Regional Chairmen in the Greater Toronto Area Regarding A Long-term Plan For the Management of Solid Waste, March, 1989", and referred to in Section 2.1.
CO-PROPONENT	see "Proponent".
CLOSING DATE (TIME)	the 28 day of December, 1989, being the last day upon which SWISC will accept Responses to the Request.
DIVERSION	the Reduction, Re-use and Recycling of wastes prior to disposal by incineration or landfilling.
EAA	the Environmental Assessment Act, R.S.O. 1980 Chapter 140 as amended.

EPA	the Environmental Protection Act, R.S.O. 1980, Chapter 141, as amended.
GTA	the Greater Toronto Area, being the area included within the Regional Municipality of Durham, the Regional Municipality of Halton, the Municipality of Metropolitan Toronto, the Regional Municipality of Peel and the Regional Municipality of York.
HOST COMMUNITY(IES)	the Community(ies) in which it is proposed to place any facility(ies) of the waste management system.
IT	the use of the neuter singular pronoun to refer to the Respondent shall be deemed a proper reference even though the Respondent may be an individual, a partnership, a corporation, or a group of two or more individuals or corporations. The necessary grammatical changes required to make the contents of this Request apply in the plural sense where there is more than one Respondent and to either corporations, associations, partnerships, or individuals (males or females) shall in all instances be assumed as though in each case fully expressed.
LONG-TERM WASTE MANAGEMENT SYSTEM	the comprehensive waste management system to serve the GTA which has undergone an EAA approval (to be implemented as soon as possible and no later than the year 1996) and as described in Section 6.1.
PARTICIPATING MUNICIPALITIES	the Regional Municipality of Durham, the Regional Municipality of Halton, the Municipality of Metropolitan Toronto, the Regional Municipality of Peel and the Regional Municipality of York.
PERSON	includes an individual, a partnership, a corporation, a municipality, a public body, an unincorporated association or any group or combination thereof.

PERPETUAL CARE	the on-going maintenance of waste management facilities following closure. Refers to necessary post closure activities including monitoring and maintenance.
PROPONENT	as defined in section 1(k) of the EAA means a person who, i) carries out or proposes to carry out an undertaking, or ii) is the owner or person having charge, management or control of an undertaking. "Co-Proponent" has similar and related meaning.
the PROVINCE	the Province of Ontario.
RECOVERY	the extraction of materials or energy from waste providing a means of reducing the quantity of waste destined for disposal.
RECYCLING	the use of a waste material as a replacement for all or part of a virgin material in a manufacturing process.
REDUCTION	the elimination, prevention or restriction of waste at its source.
RESPONDENT	a person submitting a Response to the Request.
RE-USE	the direct re-use of materials which would otherwise become waste, providing a means of reducing the quantity of waste destined for disposal.
REQUEST	the Request for Expressions of Interest, including any Addenda to the Request.
RESPONSE (OF RESPONDENT)	the written expression(s) of interest duly completed, submitted by a Respondent to the Request.
RESPONSE PERIOD	the period commencing on the date the Request is issued to the public and ending on the Closing Date.

RFP	the Request for Proposals for the development of a comprehensive long-term solid waste management system for the Greater Toronto Area, which will be prepared and issued after the Responses are evaluated and the initial public consultation process completed.
SHORT-TERM FACILITIES	any interim facility or system which may be required prior to the availability of the long-term waste management system, as referred to in Section 6.1.
SOLID WASTES	any solid, non-hazardous discarded material generated from households, commercial establishments and industry.
SWISC	the Solid Waste Interim Steering Committee (as defined in Section 4.1).

2.0 INVITATION TO SUBMIT EXPRESSIONS OF INTEREST

This section describes the background to the request; conditions attached; the type of Responses requested; and who is eligible to respond.

2.1 General

Pursuant to the Chairmens proposal dated 14 March 1989, the five regions comprising the Greater Toronto Area (the GTA), Durham, Halton, Metropolitan Toronto, Peel and York, with the support of the Government of the Province of Ontario (the "Province") have formed the Solid Waste Interim Steering Committee (SWISC) to request Expressions of Interest for the development of a comprehensive, long-term solid waste management system to serve the GTA

Solid wastes in this context do not include liquid or hazardous wastes. This intergovernmental cooperation is committed to the environmentally sound management of solid waste to include the most innovative and up-to-date technology and standards.

SWISC is requesting Expressions of Interest from any interested organization or group in the public and private sectors for a solid waste management system to serve the GTA. It is the intent of SWISC to evaluate the Expressions of Interest and issue a Request for Proposals (RFP) for the preferred alternatives for a solid waste management system, so that a contract or contracts may be awarded on the basis of the proposals received.

Only those submitting Expressions of Interest will be permitted to submit proposals. If in the examination of alternatives submitted in the EOI submissions, it is found that a viable alternative is not included, then an open Request for Proposals will be issued for that particular alternative.

There is no guarantee by SWISC or any of its members that the process for attaining a solid waste management system for the GTA will continue as set out in this Request. For example, see Section 4.1 with respect to the legal authority of SWISC and be advised that there is no guarantee that a contract will be issued by any authority or any or all of the Participating Municipalities. In addition, see the Chairmen's Proposal where it is contemplated that one or more of the Participating Municipalities may decide to refrain from continued participtionand rely on its own waste management master plan. Any and all costs and expenses incurred by any Respondent in connection with preparing a response to this Request or relating to any other matter or thing contemplated by this Request will be the sole responsibility of the Respondent.

All information contained in the Responses will be made public.

2.2 Description of Expressions of Interest Requested

To ensure that a waste management system is provided for the GTA which best meets the principles stated in Section 2, Respondents may submit Responses for one or more of the following:

(a) For a LONG-TERM WASTE MANAGEMENT SYSTEM which will be fully implemented as soon as possible and no later than the year 1996, subject to Environmental Assessment Act (EAA) and other pertinent approvals. This Expression of Interest may include the provision of short-term facilities to be implemented prior to the completion of the long-term system which may or may not become part of the long-term waste management system.

(b) For any of the following COMPONENTS OF A LONG-TERM WASTE MANAGEMENT SYSTEM which may be responded to separately by specialists in these components.

(i) Addition to the Participating Municipalities' Diversion Programs
(ii) Waste Receiving Points
(iii) Waste Receiving Facility(ies)
(iv) Transportation System(s)

(v) Waste Processing Facility(ies)
(vi) Waste Disposal Facility(ies)
(vii) Research Facility(ies)
(viii) Other Components

Responses must be clearly designated as pertaining to:

- "Long-term Solid Waste Management System", or
- "Component(s) of a Long-term Solid Waste Management System".

The Responses will be evaluated (as described in Section 9) with the facilities, programs and plans of the Regions to determine the preferred combination of alternatives to meet the objectives of the waste management system.

Submission of Responses does not constitute an offer or tender capable of acceptance by SWISC or any other person.

Responses do not have to include cost information on the system or components to be provided by Respondents or any financial information on the Respondents themselves.

2.3 Eligible Respondents

Responses are invited from any public or private sector entity, or from a joint venture formed from the public and/or private sectors which has been legally constituted in accordance with applicable laws.

2.4 Objective of the Request

This section describes the objective of SWISC in issuing this document and the principles on which it is based.

The objective of SWISC in requesting Expressions of Interest is to obtain information on a range of alternative solutions to the long-term management of solid wastes in the GTA, based on the following principles:

2.4.1 To aim at fulfilling provincial targets for diversion of solid wastes from disposal.

These targets are the diversion of 25% by the year 1992, and an additional 25% of total wastes generated for a total of 50% to be diverted by the year 2000 (see Section 4.3).

Responses will address (a) how to assist Regional and area municipalities to achieve or exceed these diversion targets at the local level or through facilities to be provided in addition to the efforts of the area municipalities and (b) how waste will be considered as a resource in the development and manufacturing of new products.

Diversion shall include reduction, recycling and re-use.

2.4.2 To consider with respect to disposal of residual waste, landfill, energy from waste and other environmentally acceptable methods.

2.4.3 To develop a system based on proven technology for processing solid wastes which will eliminate objectionable characteristics associated with some traditional waste management systems and which meets the requirements for approval under the EAA, EPA and other pertinent statutes.

2.4.4 To construct an innovative framework for new research and development in the area of solid waste reduction, re-use, recycling, and recovery.

2.4.5 To locate facilities, if possible, in receptive communities and maximize industrial development opportunities for those communities.

2.4.6 To create a waste management structure that will allow maximum collaborative efforts between municipal, regional, provincial and federal authorities; which best combines the efforts of the public and private sectors; and which serves as a world class model for environmentally sound waste management systems.

2.4.7 To provide a cost effective solution to the problem of solid waste management while reducing environmental degradation and the real costs associated with conventional waste management systems.

3.0 INSTRUCTIONS TO RESPONDENTS

This section describes conditions attached to the Request; how to obtain clarification of any aspect of the Request prior to the Closing Date; and how to enquire for additional information.

3.1 Expressions of Interest

All information described in the Expressions of Interest Form must be provided. Respondents shall declare that Responses are in all respects fair and without collusion or fraud. Private sector respondents shall declare that, except to the extent expressly stated in the declaration, no member of SWISC and no elected or other public official, is, shall be, or shall become interested, directly or indirectly, as shareholder, partner, surety or otherwise in, or in the performance of, the work described in the Responses or in any subsequent proposal or contract, or in the supplies, work or business to which it relates, or in any portion of the profits to be used therein or thereof, or in any of the monies to be derived therefrom. Where a Response is submitted from a public body with which a member of SWISC or an elected or other public official is directly or indirectly involved, this shall be so stated in the Response. The information to be submitted as part of the Responses is described in the Respondent's Check Sheet and the Expressions of Interest Form.

3.2 Submission and Evaluation of Responses

Each person will be registered in order to ensure that it receives any Addenda which may be issued to the Request.

All Responses must be submitted prior to the Closing Date using the Expressions of Interest Form, and will be evaluated in accordance with the procedures described in Section 9.

3.3 Enquiries

Should a person contemplating submitting a Response require additional information concerning any aspect of the Request or should a person be in doubt as to the meaning of the Request, it may submit a written enquiry for such additional information or for such interpretation. A

person submitting an enquiry will be responsible for its prompt delivery. Enquiries for additional information or substantive interpretation must be submitted in writing. Any such information, interpretation or interpretations will be provided in Addenda issued at least five calendar days prior to the last day of the Response Period and a copy of such Addenda will be sent to each person who has taken out a Request. SWISC reserves the right to issue any additional Addenda which it may deem necessary. Any Addenda issued shall be taken into account in preparing the Responses. SWISC will not be responsible for any verbal instruction, information or interpretation given to a Respondent during the Response Period.

To ensure consistency and co-ordination, Respondents are requested not to contact Regions directly. All enquiries regarding the Request shall be directed to:

Mr. John Farrow
Interim CAO, SWISC
23rd Floor
145 King Street West
Toronto, Ontario
Canada M5H 1V8
Telephone: (416)941-8373
Fax: (416)863-0926

4.0 BACKGROUND INFORMATION TO RESPONDENTS

This part of the Request for Expressions of Interest contains information on the creation, functions, role and authority of SWISC; the existing waste management systems in the GTA; and the quantity and characteristics of wastes which the Respondent will address in its proposed waste management system. The proposed consultation on the Request is also outlined.

4.1 The Solid Waste Interim Steering Committee

On 14 March, 1989 the Chairmen of the five Regions that make up the Greater Toronto Area (GTA) put forth a proposal outlining a collaborative and co-ordinated approach to solving the crisis of solid waste management in this rapidly growing area. These steps were aimed at establishing a solid waste management system involving all stakeholders, including participating municipalities, area municipalities, the Province and the public.

After the Chairmen's Proposal, SWISC was formed to address the multitude of major policy issues that are involved in taking this initiative.

SWISC is composed of the five Regional Chairmen, one other elected representative from each of the five Regions, the Deputy Minister of the Office for the Greater Toronto Area and the Deputy Minister of the Environment. Each member of SWISC has one vote.

SWISC is chaired by each of the Regional Chairmen in turn. The chairmanship will be rotated in alphabetical order of the Regions.

A Technical Committee, consisting of senior staff from the Regions and the Province, has been established and meets regularly to advise SWISC on resolving the complex technical requirements for developing an effective coordinated approach. The Technical Committee reports to SWISC.

The Chairmen are currently operating under a set of working guidelines to define the process for developing the long-term waste management system, and the relationship among the five regions and the Province including:

- the arrangements for requesting and evaluating Responses and, ultimately, proposals for an environmentally sound solid waste management system that utilizes proven technology and that satisfies the requirements of the EAA;

- the rights of each of the Regions either to participate in the recommended long-term system in whole or in part or to rely exclusively on its own waste management master plan;

- the nomination of contingency sites to cover any shortfall in disposal capacity that may occur prior to the implementation of the long-term system, with approval pursuant to the terms of the EPA;

- the financing of any required contingency capacity to ensure that the costs of approval, development and operation of a contingency site may be charged against users fairly, and in proportion to the amount of capacity used;

- the exploration of joint management structure options, including the possible establishment of a legislated special-purpose authority;

- the development of a project financing formula. The five Regions are to finance the activities of SWISC proportionally according to population. Fifty percent of the overall cost of SWISC activities will be borne by the Province under existing municipal grant programs; and

- the development of strategies to:
  - assist bidders to find receptive Host Communities;
  - assist interested Host Communities in attracting bidders and evaluating proposals;
  - assist municipalities that wish to become bidders to do so;
  - develop alternative site search procedures in the event that no receptive Host Community is identified by the bidders.

A report entitled "Status Report to Member Councils on the Long-term Plan for the Management of Solid Waste in the Greater Toronto Area" (referred to as the "Status Report") was issued by SWISC in August, 1989.

SWISC has received legal advice that, as a joint committee of the Councils of the Participating Municipalities, it has authority to proceed as far as the issuance of this Request and evaluation of Responses. Additional authority, whether by further resolutions of the Councils of the Participating Municipalities and/or Provincial Legislation, will be required to proceed to the issuance of an RFP and beyond. This may result in the creation of an authority or other legal entity as a successor to SWISC depending on the decisions of the Councils of the Participating Municipalities and Government of the Province of Ontario. References in this document to actions to be taken in the future by SWISC should therefore be read in light of the fact that such actions will only be taken by SWISC or its successor after the Councils of the Participating Municipalities and the Government of the Province of Ontario have, collectively, given the necessary approvals or made the necessary decisions as to the creation of a successor to SWISC and the authority to be given to it.

4.2 Solid Waste Management in The GTA

4.2.1 General

A report entitled Consolidation of Existing Solid Waste Management Plans in the Greater Toronto Area (referred to as the "MacViro Report") dated August 1989 was prepared by MacViro Consultants Inc. for SWISC as a background document for the Request for Expressions of Interest. Material from that report is summarized below. The report is available to all Respondents for additional, more detailed information.

The report reviews the databases and solid waste master plans of the GTA regional municipalities and provides a consistent information base for analyzing solid waste requirements.

Solid wastes from the Public and Private Sectors generated in the GTA are handled and disposed of through rapidly expanding diversion programs based on curb-side separation and collection; and a number of facilities including recycling depots and centres, transfer stations and landfill sites. These facilities are shown on Figure 1. The recycling centres process and market the materials collected by the blue box programs. There are also some private disposal facilities such as the 91 tonnes per day energy from waste plant operated by General Motors, Oshawa and the 66 tonnes per day energy from waste plant operated by Ford, Oakville but such

facilities are not available to either the Regions or the GTA and these wastes are not included in the quantities to be handled by the GTA.

Municipal waste collected in Metropolitan Toronto is handled through a network of some nine transfer stations (T7 to T15) where it is transferred to large trailers for haul to the landfill sites. The transfer stations in rural areas are generally located at old landfill sites and provide collection points for wastes to be hauled to the larger remaining landfill sites. These stations generally have containers for recyclables as well as solid wastes. The Halton facilities T5 and T6 are used extensively as all solid waste currently generated in Halton is exported to disposal facilities outside of the GTA. Metropolitan Toronto facilities are municipally owned, whereas the Halton facilities are privately owned and therefore only available on an interim basis.

The three key existing landfill sites within the GTA are Metropolitan Toronto's Brock West (L1) and Keele Valley (L5) sites plus Peel's Britannia (L9) site. In addition, the Brock West site serves a substantial portion of Durham Region while Keele Valley serves most of York Region. The rural areas of Durham, Peel and York are served by a number of small local landfill sites. In addition to these existing facilities, the Region of Halton has recently received approval for a new landfill site in Milton (L12) subject to judicial review.

Current solid waste, which is handled by the five Regions within the GTA, is in the order of four (4) million tonnes per year. Even with the recent extensive recycling efforts, the capacity of the existing three key landfill sites is rapidly running out. The estimated remaining capacity and projected closure dates for the three key area landfill sites are as follows:

Facility	Estimated Remaining Capacity as of 1 January 1989 (tonnes)	Projected Closure Date
Brock West (L1)	1,500,000	1990
Keele Valley (L5)	12,700,000	1992
Britannia (L9)	1,200,000	1990

4.2.2 Contingency Plans

SWISC shares the provincial targets of a 25% diversion of waste prior to disposal by 1992, increasing to 50% by the year 2000. In addition it has agreed to provide contingency landfill sites, to ensure that disposal facilities are available until an overall long-term waste management system can be implemented. The long-term system is required as soon as possible, and no later than 1996.

These contingency landfill sites would be provided on the basis of the difference between landfill requirements and capacity available:

- **GTA Landfill requirements** from 1 January 1989 to 31 December 1996 - 29,458,000 tonnes

- **GTA Capacity available**[1]:

			(tonnes)
.	Halton -	open new site (L12) by mid 1992	800,000[2]
.	Peel -	Britannia site (L9) to Agreed closure date	1,200,000
.	Metro/York -	Keele Valley Landfill site (L5)	12,700,000[3]
.	Metro/Durham -	Brock West (L1)	1,500,000
		TOTAL	16,200,000

- **GTA Landfill Capacity Shortfall:**
  (29,458,000 - 16,200,000) = 13,300,000

SWISC is currently developing contingency plans with each participating municipality to provide facilities to meet this projected shortfall in disposal capacity.

(1) Estimates based on information as of 1 January 1989. Estimates subject to update.
(2) Capacity for Halton Requirements to 1996.
(3) Respecting landfill capacity affecting Metropolitan Toronto and York Region, refer to the agreement between Metropolitan Toronto and York Region dated 24 May 1983.

4.2.3 Mandate of Regions for Solid Wastes

(a) In all five Regions, collection of municipal waste is the responsibility of the area municipalities.

Reduction, Re-use and Recycling programs are also implemented with assistance and incentives from the Regions and the Provincial government.

(b) Some commercial wastes are also collected by the municipalities, but generally employment related wastes are collected by private companies under contract to the private sector.

(c) Solid waste disposal facilities are provided by the Regions under the following enabling legislation:

Durham - under Section 144 of the Regional Municipality of Durham Act.

Halton - under Section 137 of the Regional Municipality of Halton Act.

Metropolitan Toronto - under Section 66 of the Municipality of Metropolitan Toronto Act.

Peel - under Section 132 of the Regional Municipality of Peel Act.

York - under Section 169 of the Regional Municipality of York Act.

4.3 Reduction, Re-Use and Recycling of Materials and Targets by Five Regions and Area Municipalities

4.3.1 Programs and Targets

The following programs and targets for the diversion activities had been proposed and/or implemented by the Regions, prior to issuance of the provincial targets for diversion (25% by 1992 and 50% by the year 2000). This is presented only as a guide to Respondents with respect

to opportunities to assist the Regions to achieve the provincial targets. It should be noted that at the present time, there is generally a lack of consistency in the method of measurement of the targets.

In the GTA, diversion programs to date include:

(a) **Basic "Blue Box" recycling program**

This program involves the separate collection of source-separated materials: at present these materials are newspapers, glass, and metals. Collection is generally from low density urban residential areas.

Enhanced "Blue Box" recycling program

This will involve the extension of the basic system by increasing the number of participants and the types of materials collected. The primary options for expanding the number of participants are to extend the Blue Box collection service to apartment dwellers and rural residents.

The additional materials which may be added include clear plastic (PET) bottles, mixed plastics, fine paper, corrugated cardboard, and organic materials for composting at central facilities. The collection of these materials will require a change in the strategy currently used to handle materials.

Area municipalities carry out the curbside source separation programs in support of the Regions' recycling targets. The involvement of area municipalities in these programs and the Regions' targets are shown in Table 4.1.

(b) **Public Education and Promotional Programs**

Each Region has developed extensive public involvement programs with respect to Master Plans, local facilities and reduction, re-use and recycling.

(c) **Promotion of Home Composting**

This has been introduced in the Regions of Durham and Peel, and Metropolitan Toronto and is being promoted or considered by other Regions.

(d) **Separate Collection and Composting of Leaves and Yard Waste in Spring and Fall.**
This has been undertaken in the Regions of Peel and Durham and Metropolitan Toronto.

(e) **Household Hazardous Waste Programs.**
These programs are preceded by an extensive public promotional program. The Regions of Durham, Halton, Peel and Metropolitan Toronto have established depots to receive such materials. Expansions to these programs are being considered by all Regions.

(f) **Banning Materials at Landfills and Transfer Stations When Alternative Processing is Available.**
The banning of cardboard from landfill sites has been coupled with programs to recover the material from industrial and commercial sites. All Regions have banned the disposal of cardboard from major landfill sites and transfer stations. Expansion of landfill bans are under consideration for other materials such as construction and demolition materials, when viable alternatives become available.

(g) **Increase in Tipping Fees and User Fees at Landfills and Transfer Stations to Provide Diversion Incentives.**
Significant increases have been applied at all major disposal facilities. For example Metropolitan Toronto's landfill tipping fee is $83.33 per tonne as of 1 May 1989.

4.3.2 Summary of Regional Plans

Durham

The Region of Durham has established a target of 25% for waste diversion from landfill by 1992. In addition to the existing residential curbside collection system, they currently have plans to increase the types of materials collected as well as the following activities:

- household hazardous waste program;
- composting demonstration followed by construction of a central composting facility;
- pilot apartment recycling program;
- pilot mixed paper recycling;
- expansion of recycling drop-off depot network;
- demolition and construction waste initiative;

- wood recycling project;
- PET/mixed plastics recycling project;
- expansion of existing recycling facilities and vehicles; and
- promotion of industrial/commercial waste reduction.

In addition, the Region is considering a number of other "beyond curbside" measures, including wastes such as various papers, plastics and construction materials from institutional, commercial and industrial generators.

Halton

Halton has not adopted a diversion target at this time, although they have been involved in recycling efforts for a number of years. They currently estimate that they are diverting 16% of the total solid waste stream by the following activities:

- recycling of usual materials plus corrugated cardboard;
- low and high density residential and rural recycling programs;
- paper recovery at municipal offices;
- mandatory recycling by-law effective January 1990;
- landfill cardboard ban;
- sewage sludge landfill ban (sludge is currently applied to agricultural lands);
- future landfill ban on construction materials and vehicle tires when alternatives are available;
- a household hazardous waste depot with a second one planned;
- high tipping fee of $83.50 to encourage diversion measures;
- pilot programs to study a variation of the European Wet/Dry process; and
- initiatives in battery recycling.

Additionally, consideration is being given to collecting mixed plastics and commercial glass, expand the depot system to recreational and high traffic areas, and expand the blue box program to rural areas.

Halton Council has indicated its ongoing support for energy from waste including an inter-regional plant.

Metropolitan Toronto

Metro initially set a target of 30% diversion of 1987 waste quantities by 1990 but has subsequently endorsed the provincial targets of 25% by 1992 and 50% by the year 2000. The general measures which they have recommended to achieve this are as follows:

- increase disposal fees and introduction of a user-pay system;
- a broad range of pilot projects and specific initiatives;
- banned recyclable materials from landfills;
- requests to other levels of government to undertake complementary and supportive initiatives;
- public involvement and education program on the solid waste disposal problems, options for solution, and their ramifications; and
- a series of emergency measures for responding to the impending short fall in landfill capacity.

Metro has 33 specific measures to address these general recommendations, which are described in the MacViro report.

Peel

Peel's Solid Waste Master Plan recommends a target of diverting 34% of population related wastes and 24% of employment related wastes by the year 2001. In addition to the blue box program, the Region and municipalities are actively pursuing the following activities:

- landfill site recycling depots;
- church paper recycling;
- battery recycling at a central retail store;
- salvaging operations at Caledon landfill site;
- efforts to reduce clean fill disposal at landfills;
- fall yard waste collection and Christmas tree chipping;
- investigation of apartment recycling approaches;
- demonstration of separate compost pick-up;
- used oil drop-off sites;
- waste diversion credits to private sector groups;
- public education and promotion;

- home composters being made available to residents; and
- a household hazardous waste depot operating at Britannia Landfill.

Commercial and Industrial

- waste inventories and exchange;
- central collection and sorting facility;
- fine paper recycling;
- clean rubble and concrete recycling;
- ban on cardboard and tires;
- consideration of future ban on drywall and wood pending development of recycling options; and
- increase in tipping fees to private haulers.

EAA aproval has been received for a 400 tonne/day energy from waste plant in Peel. Council approval will be sought shortly.

York

Most area municipalities in the Region have, or will soon have, Blue Box curbside programs. The Region is proposing to establish a recycled materials processing facility. The Region has established diversion targets of 25% by 1995 and 50% by 2011. However, to increase the waste diversion, the following programs are being considered:

- expansion of Blue Box system;
- a range of commercial and industrial initiatives;
- construction and demolition waste initiatives;
- promotion and support of home composting;
- "source reduction" program;
- dry sorting operations;
- market development for additional materials;
- support and encouragement of private diversion efforts;
- increased communication between business and community leaders for coordination and promotion; and
- collection and central composting of "pure organic" wastes.

4.3.3 Provincial/Federal Action on Packaging and Diversion of Wastes

The Canadian Council of Resource and Environment Ministers (CCREM), which includes the Federal and all Provincial Ministers of the Environment, released a communique in April 1989 recognizing "that waste management is an urgent and pressing national problem". They instructed the waste management committee of CCREM "to develop a packaging policy for Canada within a broad review of solid waste management opportunities including government purchasing and recycling policies". It was agreed that targets and schedules for waste minimization be established including a 50% diversion of wastes by the year 2000.

The Municipality of Metropolitan Toronto has requested that both the Federal and Provincial governments take immediate legislative and regulatory action to reduce packaging and to require that packaging which cannot be eliminated be recyclable, and to reduce production of non-durable goods.

Metro has also requested that the Province of Ontario:

- establish, expand and promote office paper recovery programs at all of its Metro offices, in addition to any other recyclable materials;
- Ministries of the Environment, Energy and Transportation assist in market development for used tires as fuel supplement for cement kilns or as an asphalt additive;
- Ministry of the Environment establish targets for banning recyclables from landfills;
- Ministry of the Environment facilitate diversion of Metro recyclables to other jurisdictions which have available capacity when Metro does not have the capacity; and the
- Ministry of Education include in the 1989 curricula, information on the waste management situation, possible solutions and their ramifications.

Additionally, Metro has requested that the Government of Canada establish, expand and promote office paper recovery programs at all of its Metro offices, as well as programs to recover any other recyclable materials.

The Chairmen's proposal urged the Federal and Provincial Governments to enact legislation to reduce the volume of packaging in the waste stream.

4.3.4 Marketing

In the past and present, each Region has been responsible for establishing their own markets for recycled materials. Thus, there are Regional differences in demand and prices for different materials.

However, in the future, markets, agreements and prices may be negotiated for the entire GTA area. The Province has agreed to take the lead in ensuring that markets are available.

A committee has been formed with members from the GTA to investigate, develop and promote effective government purchasing policies which will:

a) Reduce the quantity of waste produced by government bodies and associated agencies, boards, commissions and affiliated contractors.

b) Provide markets necessary to promote and sustain 4Rs initiatives.

c) Develop a process to facilitate co-operative or joint purchasing among the different levels of government so as to substantially influence and enhance item (b) above.

The committee is called "Governments Incorporating Procurement Policies to Eliminate Refuse" (G.I.P.P.E.R.). It includes representatives from the Participating Municipalities; the Ontario Ministries of the Environment and Government Services; the Federal Ministries of the Environment and Supply and Services; the Environmental Choice Program; and the Canadian Standards Association.

4.3.5 Measurements

Several alternatives are under consideration to measure the achievement of diversion targets in all Regions. These include for:

(a) **Population Related Wastes**

The establishment of a common base year for waste "generation" quantities. This might be related to the quantities of wastes measured at disposal facilities in that year, plus an

allowance for quantities removed through diversion activities at that time. As these activities can be readily identified for this waste stream, the quantities in subsequent years can be determined.

(b) **Employment Related Wastes**

Again the establishment of a common base year as reference for waste generation quantities. Private sector achievements in the reduction, re-use and recyling and variations in industrial types are not readily measured and may require the implementation of a complex waste accounting and weigh-bill system.

4.3.6 Legislation

Presently, involvement in waste diversion is voluntary. However, additional legislation by the Provincial government and strengthening of the Regional Acts and municipal by-laws is under consideration.

4.4 Projected Type and Quantities of Materials to be Handled by Respondent

4.4.1 Generated Wastes

The generation of wastes is a function of a number of factors including population levels, the level and nature of economic activity, and the consumption patterns of the residents, businesses and institutions.

Not all wastes generated in the GTA have been measured. Some wastes are disposed of privately, such as those through the General Motors and Ford energy from waste plants; through scrap dealers; and some have been traditionally recycled such as asphalt, concrete and corrugated cardboard without appearing in the waste streams measured and requiring disposal by the Regions. It is assumed that these wastes will continue to be disposed of outside those waste streams to be disposed of by the Regions.

The quantities of remaining wastes have generally been estimated from the wastes measured at the disposal facilities servicing the five Regions, plus measurements or estimates of those wastes which are now being removed through the diversion programs and which would previously have gone to these disposal facilities.

In order to assist the Respondent in submitting a system to serve each of the five Regions, the total waste quantity projections through to the year 2011 from each Region, and for the GTA as a whole, are provided in the MacViro Report.

The waste quantities projected for the GTA have been extrapolated through 2016 and are shown on Table 4.2. These figures represent the upper limit of the total waste quantities to be handled by the Respondent.

As SWISC may or may not acquire the authority to direct all of these wastes to the proposed system, responses shall include an analysis of the effects of the lower waste quantity projections shown on Table 4.3.

4.4.2 Wastes Remaining After the Diversion Programs

Based on the materials to be removed to achieve the target for a 50% diversion of wastes by the year 2000, as described in Section 4.3, the wastes remaining for disposal from the GTA as a whole are also provided in Table 4.2.

Respondents, for planning purposes, should use these estimated quantities. These quantities may be altered due to new legislation; inability to direct private sector wastes; number of participating Regions, etc.

4.4.3 Composition of Wastes

Firm, recent local data on the composition of the total waste stream is not available. Municipal wastes make up in the order of 40 percent of the total waste stream. Some studies of the composition of municipal waste have been undertaken over the years. These studies include:

- Bird and Hale, *et al.*, Municipal Refuse Statistics for Canadian Communities of Over 100,000 (1976-1977), Environment Canada, October 1979.
- Ontario Waste Management Advisory Board, Urban Solid Waste Generation in Ontario, July 1976.
- Franklin Associates, Characterization of Municipal Solid Waste in the U.S. 1960-2000, published 1986.

The industrial portion of the waste stream is highly variable and generally, is dependent on the nature of the economic activities in a given area. Some municipalities have undertaken limited local studies of industrial/commercial composition, generally as part of specific diversion initiatives. These studies do not yield enough information to reasonably estimate the overall composition of the industrial/commercial waste stream in the GTA.

Responses are to be based on Respondents experience with the GTA and similar areas. Additional information may be available for the Request for Proposals.

4.5 Consultation on the Request

The GTA program for the management of solid wastes, in the long-term, is subject to the provisions of the Environmental Assessment Act (EAA). The EAA has been interpreted to require consultation with the public throughout the planning process. It is important that the public be given the opportunity to provide input at critical points in the process. The timing of the consultation is critical because the process must be responsive to the concerns of the public.

As a first step, public consultation must occur in participating GTA Regions. (After selection of a preferred system, in the event that a system component is proposed to be located outside of the GTA, an additional process of public consultation will be required in each of the communities where waste management facilities may be located.)

A consulting firm, the LURA Group, has been retained to develop and facilitate the public consultation program. The three-stage program has been developed to ensure that the public has every opportunity to contribute effectively throughout the process.

Part of the first stage of this public consultation program will be to involve the public with respect to proposed criteria for evaluating Responses as set out in Section 9 of this Request. A report entitled Public Consultation/Criteria Evaluation will be prepared.

Table 4.1

STATUS OF SOLID WASTE DIVERSION PROGRAMS

	Basic Bue Box	Investigating/ Implementing Enhanced Blue Box	Implementing Industrial & Commercial Programs	Target
Durham		*	*	25% of all Generated wastes by 1992
Newcastle	* (urban areas)			
Oshawa	*			
Whitby	*			
Ajax	*			
Pickering	*			
Scugog	* (urban areas)			
Uxbridge	* (urban areas)			
Brock	* (urban areas)			
York			*	25% by 1995 and 50% by 2011 (may be accelerated to meet provincial targets as opportunities arise)
Markham	*			
Richmond Hill	*			
Vaughan	*			
Whitchurch-Stouffville	*			
Aurora				
Newmarket	*			
King				
East Gwillimbury	*			
Georgina	*			

Source: MacViro Report, Table 4.1.

Table 4.1 (Cont'd)

	Basic Bue Box	Investigating/ Implementing Enhanced Blue Box	Implementing Industrial & Commercial Programs	Target
Metropolitan Toronto		*	*	
Scarborough	*			25% of all wastes by 1992 and 50% by the year 2000
East York	*			
Toronto	*			
York	*			
North York	*			
Etobicoke	*			
Peel			*	23% reduction in all waste generated over 40 year planning period (corresponds to 34% of population related waste and 24% of employment
Mississauga	*			
Brampton	*	*		
Caledon	*			
Halton		*	*	No fixed targets but currently achieving 15-16% reduction of all wastes (consideration of targets is currently under review)
Oakville	*			
Burlington	* (urban areas)			
Milton	* (urban areas)			
Halton Hills	* (urban areas)			

Source: MacViro Report.

TABLE 4.2

TOTAL GREATER TORONTO AREA WASTE GENERATION, DIVERSION & DISPOSAL PROJECTIONS

YEAR	TOTAL POPULATION (1)	WASTE QUANTITY GENERATED (2)	MINIMUM WASTE DIVERTED (3)	MAX WASTE TO LANDFILL & INCINERATION (2)–(3)	AVERAGE TONNES PER DAY (4)	CUMULATIVE MAX WASTE TO LANDFILL & INCINERATION
1989	4,017,000	4,350,000	435,000	3,915,000	15,058	3,915,000
1990	4,112,000	4,453,000	668,000	3,785,000	14,558	7,700,000
1991	4,207,000	4,563,000	913,000	3,650,000	14,038	11,350,000
1992	4,278,000	4,647,000	1,115,000	3,532,000	13,585	14,882,000
1993	4,349,000	4,732,000	1,183,000	3,549,000	13,650	18,431,000
1994	4,420,000	4,816,000	1,204,000	3,612,000	13,892	22,043,000
1995	4,491,000	4,901,000	1,225,000	3,676,000	14,138	25,719,000
1996	4,562,000	4,986,000	1,247,000	3,739,000	14,381	29,458,000
1997	4,620,000	5,057,000	1,770,000	3,287,000	12,642	32,745,000
1998	4,678,000	5,129,000	2,052,000	3,077,000	11,835	35,822,000
1999	4,736,000	5,200,000	2,340,000	2,860,000	11,000	38,682,000
2000	4,794,000	5,272,000	2,636,000	2,636,000	10,138	41,318,000
2001	4,852,000	5,344,000	2,672,000	2,672,000	10,277	43,990,000
2002	4,902,000	5,407,000	2,704,000	2,703,000	10,396	46,693,000
2003	4,952,000	5,470,000	2,735,000	2,735,000	10,519	49,428,000
2004	5,002,000	5,534,000	2,767,000	2,767,000	10,642	52,195,000
2005	5,052,000	5,598,000	2,799,000	2,799,000	10,765	54,994,000
2006	5,102,000	5,662,000	2,831,000	2,831,000	10,888	57,825,000
2007	5,148,200	5,721,000	2,861,000	2,860,000	11,000	60,685,000
2008	5,194,400	5,781,000	2,891,000	2,890,000	11,115	63,575,000
2009	5,240,600	5,842,000	2,921,000	2,921,000	11,235	66,496,000
2010	5,286,800	5,902,000	2,951,000	2,951,000	11,350	69,447,000
2011	5,333,000	5,962,000	2,981,000	2,981,000	11,465	72,428,000
2012	5,379,200	6,023,000	3,012,000	3,011,000	11,581	75,439,000
2013	5,425,400	6,084,000	3,042,000	3,042,000	11,700	78,481,000
2014	5,471,600	6,145,000	3,073,000	3,072,000	11,815	81,553,000
2015	5,517,800	6,206,000	3,103,000	3,103,000	11,935	84,656,000
2016	5,564,000	6,267,000	3,134,000	3,133,000	12,050	87,789,000

(1) BASED ON GTA/T & E (MEDIUM SCENARIO) POPULATION PROJECTIONS
(2) PROJECTIONS BASED ON 1.083 TONNES PER CAPITA PER YEAR IN 1990 INCREASING TO 1.126 TONNES/CAPITA/YEAR IN 2016
(3) BASED ON MINIMUM REDUCTION TARGETS PRESENTED IN TABLE 3.7 OF MACVIRO REPORT
(4) AT 260 OPERATIONAL DAYS PER YEAR (EXCLUDES SEASONAL PEAK)

SOURCE: SWISC TECHNICAL COMMITTEE JUNE 1989
(NOTE POST 2011 PROJECTIONS BASED ON EXTRAPOLATION OF TRENDS IN PRIOR YEARS)
BASED ON INFORMATION IN MACVIRO REPORT

TABLE 4.3

LOW RANGE PROJECTIONS OF WASTE QUANTITIES REQUIRING DISPOSAL (1)

YEAR	WASTE TO LANDFILL & INCINERATION	CUMULATIVE WASTE TO LANDFILL & INCINERATION	AVERAGE TONNES PER DAY TO LANDFILL & INCINERATION (2)
1989	2,740,000	2,740,000	10,538
1990	2,649,000	5,389,000	10,188
1991	2,555,000	7,944,000	9,827
1992	2,472,000	10,416,000	9,508
1993	2,484,000	12,900,000	9,554
1994	2,528,000	15,428,000	9,723
1995	2,573,000	18,001,000	9,896
1996	2,617,000	20,618,000	10,065
1997	2,301,000	22,919,000	8,850
1998	2,154,000	25,073,000	8,285
1999	2,002,000	27,075,000	7,700
2000	1,845,000	28,920,000	7,096
2001	1,870,000	30,790,000	7,192
2002	1,892,000	32,682,000	7,277
2003	1,914,000	34,596,000	7,362
2004	1,937,000	36,533,000	7,450
2005	1,959,000	38,492,000	7,535
2006	1,981,000	40,473,000	7,619
2007	2,002,000	42,475,000	7,700
2008	2,023,000	44,498,000	7,781
2009	2,044,000	46,542,000	7,862
2010	2,065,000	48,607,000	7,942
2011	2,087,000	50,694,000	8,027
2012	2,108,000	52,802,000	8,108
2013	2,129,000	54,931,000	8,188
2014	2,150,000	57,081,000	8,269
2015	2,172,000	59,253,000	8,354
2016	2,193,000	61,446,000	8,435

(1) ASSUMING 30% OF GENERATED WASTE, AS PER TABLE 3.6, UNAVAILABLE DIVERSION TARGETS, AS PER TABLE 3.7, APPLIED TO REMAINING WASTES TO YIELD FOLLOWING PROJECTIONS OF QUANTITIES FOR DISPOSAL

(2) AT 260 OPERATIONAL DAYS PER YEAR

SOURCE: SWISC TECHNICAL COMMITTEE AUGUST 1989
MACVIRO REPORT, TABLE 3.10

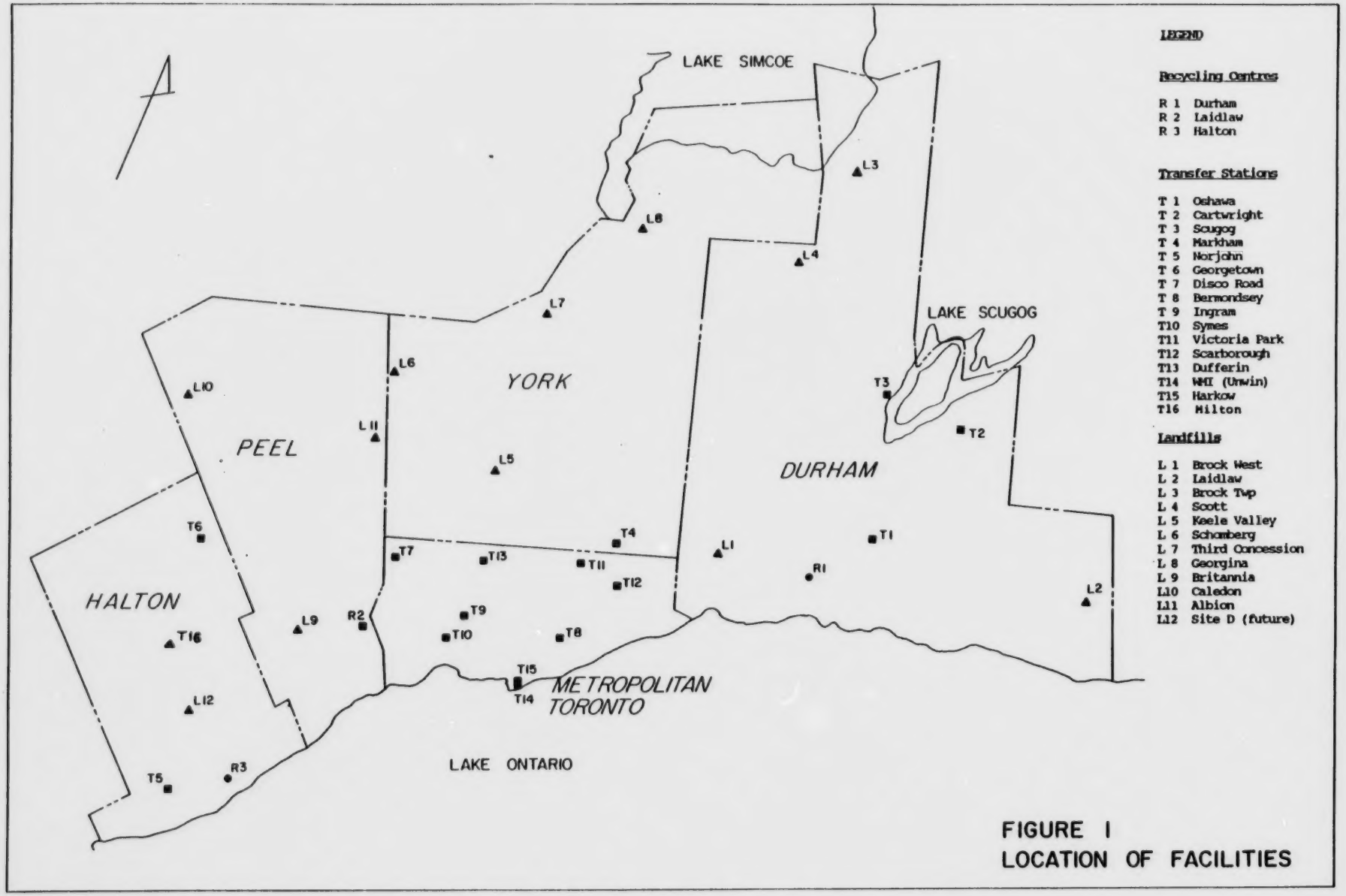

FIGURE 1
LOCATION OF FACILITIES

5.0 ENVIRONMENTAL ASSESSMENT ACT AND OTHER APPROVALS

To assist the Respondent in preparing a response which will meet the requirements for obtaining approval, the following summary of pertinent legislation is provided. Not all of the legislation summarized may be applicable, whereas other legislation may be applicable to a specific response. This section also outlines the respective roles of SWISC and Respondents in complying with legislative requirements.

5.1 THE ENVIRONMENTAL ASSESSMENT ACT, RSO 1980, CHAPTER 140

5.1.1 A Summary of the EAA

The purpose of the EAA is "the betterment of the people of the whole or any part of Ontario by providing for the protection, conservation and wise management of the environment in Ontario". "Environment" as broadly defined by the EAA includes air, land, water, plant and animal life, as well as social, economic and cultural conditions or interrelationships that influence the life of a person or a community. The Act has been interpreted to require a process of good environmental planning, including a systematic evaluation of the net environmental effects of all reasonable alternatives, within a framework of involvement with affected parties.

The EAA applies to public sector undertakings and to private sector undertakings if designated by regulation. Respondents should assume that any undertaking will be subject to the full requirements of the EAA.

The Environmental Assessment Act requires a proponent of an undertaking to which the Act applies, to submit an environmental assessment of the proposed undertaking to the Minister. A Proponent cannot proceed with the undertaking until the assessment is accepted and approved by the Minister or the Board. No other licence or approval may be granted until such time. The content requirements of an environmental assessment document are set out in subsection 5(3) of the Act.

Upon submission of the environmental assessment (EA), the Ministry of the Environment:

i) Causes a review of the EA to be carried out, usually by various Ministries and Agencies of the Ontario Government;

ii) Gives notices that the EA and the review are available for public inspection and invites submissions with respect to the undertaking and the need for a hearing by the Environmental Assessment Board.

The Minister decides if an Environmental Assessment Board hearing is required. Where no hearing is required the Minister decides on the acceptability of the EA, and with cabinet consent, on the approval of the undertaking. Where a hearing is required, the Minister or the Environmental Assessment Board may decide upon the acceptability of the EA, and the Environmental Assessment Board decides upon approval of the undertaking.

A series of policies and guidelines have been developed under the Act, including:

- MOE Policy 03-04, Environmental Assessment Planning and Approvals;
- Interim Guidelines on Environmental Assessments and Approvals, July 1989;
- MOE Policy 03-01, The Role of the Review and the Review Participants in the EA Process; and
- Guidelines and Policy on Pre-Submission Consultation in the EA Process, November 1987.

These documents are available from the Environmental Assessment Branch of the Ministry of the Environment.

5.1.2 The SWISC Approach to Complying with the EAA

The approach to complying with the EAA is based on the use of expressions of interest to assist SWISC in compiling and evaluating a reasonable range of available alternatives, in order to

select a preferred waste management system. Requests for proposals will then be issued for that preferred system or components thereof.

SWISC will examine a reasonable range of alternative solutions to the long-term management of solid waste in the GTA. This examination will include alternatives identified in expressions of interest, regional waste management master plans and any other reasonable alternative identified by the technical committee or its consultants. The advantages and disadvantages to the environment of individual components and various combinations of these components will be evaluated using a net effects analysis to select a preferred system or systems.

This evaluation by SWISC is intended to satisfy the EAA requirement that a Proponent or Co-proponents examine alternatives to the undertaking. **Respondents will be required to describe in a generic way, the environment that might be affected and the effects that might be caused by their proposals and any actions necessary to prevent, mitigate or remedy those effects, and to evaluate the advantages and disadvantages to the environment of their proposals.** Respondents are not required to include any evaluation of alternative solutions in their expressions of interest.

Following selection of the preferred system(s), SWISC or a new management authority plans to issue RFPs for the whole system(s) and for its components. The advantages and disadvantages of the proposals to the environment will be evaluated by SWISC or the new authority using a net effects analysis in order to select the preferred components of the preferred system.

This is intended to satisfy the EAA requirement that a Proponent or Co-proponents examine all reasonable alternative methods of carrying out the undertaking. Bidders will be required to describe the environment that might be affected, the effects that might be caused by their proposals and any actions necessary to prevent, mitigate or remedy those effects, and to evaluate the advantages and disadvantages to the environment of their proposals. Bidders will not be required to include any evaluation of alternatives.

The preferred components of the preferred system will constitute the undertaking under the EAA. SWISC or the new authority and the successful bidder(s) will be the Co-Proponents of that undertaking and will proceed jointly to prepare the EA document. It is anticipated that additional field investigations will be necessary at this stage to complete the EA and EPA documentation.

Following completion of the EA document, SWISC or the new authority and the successful bidder(s), as Co-Proponents, will seek approval to proceed with the undertaking according to the process described above.

5.2 THE ENVIRONMENTAL PROTECTION ACT, RSO 1980, CHAPTER 141, AS AMENDED

The purpose of the Environmental Protection Act (EPA) is to provide for the protection and conservation of the natural environment. It is the primary environmental protection statute in the Province of Ontario and combines a large number of general and specific prohibitions with numerous administrative and licensing provisions. In particular, certificates of approval are required under section 8 for air emissions, and under section 27 for waste management systems and waste disposal sites.

Section 8 approval is required for most air emissions, including those from any incinerator or energy from waste facility.

An application for a waste management system or waste disposal site under section 27 is made to the Director, who may then refer it to the Environmental Assessment Board. In most cases, such a referral is mandatory. The Board has the power of decision under the Act, and the Director is required to implement the Board's decision. In most cases, the Board instructs the Director as to terms and conditions to be imposed on a certificate of approval.

A series of policies and guidelines have also been developed under the EPA, including:

- Policy No. 14-15: Engineered Facilities at Landfills that Receive Municipal and Non-hazardous Wastes with Associated Guidelines
- Policy No. 15-08: Incorporation of the Reasonable Use Concept into MOE Groundwater Management Facilities
- Policy No. 01-01: Combustion in Incinerators
- Policy No. 02-03: Financial Assurance
- Policy No. 01-03: Air Pollution Control on Incinerators

o	MOE Technical Guideline	Advice to Applicants and to Consultants in Preparing Hydrogeological Reports for Proposed Landfill Sites (July 1984).

These are available from the Approvals Branch of the Ministry of the Environment.

Successful bidder(s) will be required to carry out the work necessary to prepare the requisite EPA applications.

5.3 THE PLANNING ACT, 1983, SO 1983, Chapter 1 (AS AMENDED)

The Planning Act provides the legislative basis for land use planning in the Province. Solid Waste Management Policies and programs for the disposal of solid waste may be incorporated in local Official Plans, and the impact of these policies and programs on land use planning must be considered.

Section 3 of the Planning Act provides for policy statements on matters relating to Municipal planning that are of Provincial interest and where approved, municipalities and Proponents shall have regard to these policy statements. The policy statements on Mineral Aggregate Resources and Floodplains have been approved, and proposed policies on Foodland Preservation and Wetlands are currently under review. Due consideration must be given to these policies and proposed policies.

Any proposed facility may require Official Plan and Zoning Bylaw amendments by the municipality. An appeal from a decision of a municipal council may be made to the Ontario Municipal Board.

5.4 Other Applicable Legislation

In addition to the legislative authority addressed above, the development of a waste management system and specific waste management facilities may require various permits, licences or approvals covered under a variety of other legislation and regulations.

These include the Conservation Authorities Act, the Lakes and Rivers Improvement Act, the

Municipal Act, the Ontario Heritage Act, the Expropriations Act, the Ontario Municipal Board Act, the Niagara Escarpment Planning and Development Act, the Parkway Belt Planning and Development Act, Pits and Quarries Control Act, the Ontario Water Resources Act and the Municipal Franchises Act.

Proposals involving federal lands or facilities may require federal approval.

5.5 CONSOLIDATED HEARINGS ACT, 1981, SO 1981, CHAPTER 20

This Act applies to proposed undertakings which may be subject to more than one hearing under one or more of the Acts set out in the Schedule, or prescribed by the regulations of the Act. These include the Environmental Assessment Act, the Environmental Protection Act, the Planning Act, and many of the other statutes listed in Section 5.4.

Other Acts may be included by special cabinet regulation.

The Act is triggered when a Proponent gives notice to the Hearings Registrar that a consolidated hearing is required. The Chairman of the Environmental Assessment Board and the Chairman of the Ontario Municipal Board together then establish a Joint Board from members of their respective Boards.

A Joint Board has the authority to hold a hearing to consider the matter that could be considered at the individual hearings specified in the notice to the Hearings Registrar, and to make and issue a decision in respect of each of those matters.

The Consolidated Hearings Act is particularly relevant to waste management undertakings since hearings are usually required under several statutes.

6.0 INFORMATION ON SYSTEMS AND FACILITIES TO BE SUBMITTED BY RESPONDENTS

This section defines the information which will be required for our evaluation of the Responses and describes the role of host communities. Respondents may submit Responses for any one or more of the following.

6.1 Long-term Waste Management System

The long-term waste management system is to be fully implemented as soon as possible and no later than the year 1996, subject to EAA and other pertinent approvals. Expressions of Interest for the long-term waste management system may include the provision of short-term facilities to be implemented prior to completion of the long-term system which may or may not become part of the long-term waste management system.

Expressions of Interest must contain the following information:

(a) a full description of the proposed system with any plans and drawings necessary for a complete understanding of the submission and to demonstrate how it meets the principles stated in Section 2.

(b) a full description of each component of the system as required in Section 6.2.

If any of the information requested is not applicable to a specific submission, the Respondent shall so state with an explanation thereof. If additional components and information are required to describe the system, the Respondent shall add appropriate sections and provide the same level of detailed information.

(c) where short-term facilities are included in the proposed long-term system, they shall be clearly identified as such and the information required in Section 6.2 submitted.

(d) the specific information requested with respect to:

- o Diversion of Waste (6.3),
- o Host Community(ies) Involvement (6.4),
- o Employment (6.5), and
- o Timing (6.6).

If the Respondent is unable to supply all of the specific information at this time, it should so state with reasons therefor.

6.2 Components of a Long-term Waste Management System

Expressions of Interest for long-term waste management systems shall provide the following information with respect to each component of the systems in addition to the information required on the overall systems.

The following information shall also be provided in Expressions of Interest for the supply of a component or components only.

This information is essential to an evaluation of the alternatives available to SWISC. As described in Section 9.0, it may be found desirable to replace individual components of a proposed long-term system with components submitted by others.

6.2.1 Information Required for Each Component

This shall include:

(i) A full description of the component and its operation related to proven solid waste management and utilizing best available control technology. This shall include a detailed description of comparable proven facilities; their scale; length of operation; location and ownership.

ii) Description of any alternatives which the Respondent considered in selecting the component.

iii) Generic description of potential environmental impacts; mitigation measures proposed;

and net effects on the environment of the component (using the broad definition of the environment in the EAA).

iv) Flexibility of the component to incorporate future developments.

v) Where the component forms part of an overall system, a statement by the Respondent with respect to whether the component could be replaced by a similar component without invalidating the system submitted.

vi) Proposed location(s) of the components and status of acceptability to the host commmunity or Province or Federal Government if located on Provincial or Crown lands (see Section 6.4).

vii) Description of any lands and services which would have to be acquired in addition to those already owned by the Respondent .

viii) Status of component with respect to approvals to construct and operate. This would include a description of any investigations already carried out which would be required to obtain approvals.

ix) Anticipated life of component.

x) A summary description of the maintenance and safety programs which would be required for the component.

xi) Description of provisions for continuous monitoring of the component to ensure satisfactory operation, in addition to monitoring by the Regulatory Authorities.

xii) Description of the end-use, perpetual care and/or close-out conditions for the component.

xiii) Description of contingency plans:

a) in the event that a component is not ready for operation in accordance with the schedule for the overall system.

b) in the event of failure of the proposed component due to weather; labour problems; mechanical difficulties; basic design, etc.

6.2.2 Component - Addition to the Participating Municipalities' Diversion Programs

From the information provided in Section 4.0 on the existing and proposed Regional waste management programs, the Respondent may wish to expand the efforts of the area municipalities in order to meet the targets of the proposed long-term waste management system(s). Any such submissions are to be presented under this component, including the information required under Section 6.3.

6.2.3 Component - Receiving Point(s) for Waste From Participating Municipalities

From the information provided in Section 4.0 on the existing and proposed local waste management systems, the Respondent should stipulate the location(s) at which it would prefer to receive the solid wastes from the participating municipalities and on which it has based its submission.

The Respondent shall also stipulate whether it requires the participating municipalities to deliver wastes in any separated or pre-conditioned manner in order to meet the objectives of the proposed waste management system.

6.2.4 Component - Receiving Facility(ies)

The Respondent shall describe the manner in which it wishes to receive wastes from the participating municipalities (i.e. by packer truck, transfer trailer, small vehicles); and how the material will be received and processed by the Respondent.

Should the Respondent propose to use existing facilities such as transfer stations or existing disposal sites, it shall describe its assumptions and any modifications required to incorporate such facilities into the Respondent's system.

6.2.5 Component - Transportation to Processing/Disposal Facility(ies)

The Respondent shall describe how it intends to transfer the waste from the receiving facility(ies), if any, to the process and disposal facilities. This will include information on any intermediate storage and/or sorting facilities; and compaction or other changes to the waste as received by the Respondent.

6.2.6 Component - Processing Facility(ies)

This component is to include all facilities in addition to those proposed in Section 6.2.2, "Addition to the Participating Municipalities' Diversion Programs" which are designed to achieve the diversion target of a minimum 50% by the year 2000.

In addition to the description to be submitted with respect to the Processing Facility(ies) in this section, information is required under Section 6.3.

6.2.7 Component - Disposal Facility(ies)

Disposal facilities may include landfill, incineration and energy from waste facilities. The Respondent's description of the disposal facilities for wastes remaining after the addition to the participating municipalities diversion programs (6.2.2) and Processing Facility(ies) (6.2.6) components, shall include information on any site investigations carried out with respect to selection of the proposed facility(ies).

6.2.8 Component - Research Facility(ies) and Demonstration Projects

The Research Facility(ies) is required to advance the development of solid waste management as a whole. The Respondent should relate the type of facility proposed to its overall waste management system to highlight how the proposed facility could improve the system.

A description of the facility(ies), proposed scale and method(s) of funding for the research facility shall be provided.

Respondents with waste management systems unproven in full scale operations should consider submitting Responses for this component.

6.2.9 Other Components

The Respondent shall submit a full description of any other key component of its proposed system, or separate facility proposed, including the type of information required in the preceding sections. For example, this may include a separate proposal for the purchase of recycled materials from the GTA.

6.3 Diversion of Waste

The Respondent shall describe how the proposed waste management system will address the provincial target of 50% diversion of wastes by the year 2000.

In response to Section 6.2.2 "Addition to the Participating Municipalities' Diversion Programs" and Section 6.2.6 "Processing Facility(ies)" the respondent shall provide the following information:

(a) Proposed method of measurement of achieving diversion targets.

(b) Percentage diversion by year, to year 2000 and beyond, if applicable. Preference will be given to submissions which can demonstrate that higher percentage diversions will be achieved earlier.

(c) Location of facility(ies).

(d) Proven reliability and experience with proposed facility(ies).

(e) Proposed method of operation.

(f) End Products:
- o description of end products.
- o description of markets available for end products and degree to which commitments have been obtained to receive end products. Where no commitments have been obtained, the respondent shall describe its marketing plan and any assistance required from SWISC or the Province.

6.4 Host Community(ies) Involvement

Preference will be given to Responses which have identified a community(ies) willing to host any of the components of the waste management system. However this is not an exclusive requirement for Responses as SWISC is prepared to assist in locating such host communities.

The Respondent shall provide the following information with respect to the location of each of the proposed facilities:

(a) Any Resolution of the Council of the host community(ies) confirming their willingness to be the host community(ies) for the respondent's proposed facility(ies) or other indication that the community is willing to consider acceptance of the proposed facilities.

(b) A description of the proposed degree and nature of host community participation in management of facilities within its jurisdiction.

(c) Any commitments made on benefits to accrue to the host community(ies).

6.5 Employment

The respondent shall provide an estimate of the employment by numbers (full-time and part-time), classification and by location, as a result of the proposed system(s) and components.

The information shall be provided for each component of the proposed system(s).

6.6 Timing

The respondent shall provide an estimate of the time required for construction and implementation of the system(s) or components, resources proposed and infrastructure facilities to be used, following receipt of all necessary approvals.

The correlation between facilities for a long-term system and any plans to provide facilities prior to completion of the long-term system shall be shown.

7.0 OWNERSHIP AND OPERATION OF SYSTEM(S) AND FACILITIES

This section describes the options which SWISC will consider in the evaluation of Responses. The flexibility of Respondents to the various options will be required for the evaluation.

7.1 General

SWISC will be recommending to the Participating Municipalities an appropriate structure to manage the proposed solid waste system in the GTA. There are numerous options and precedents including a joint solid waste management authority established by Provincial legislation.

An appropriate structure will be established prior to the award of contracts for the solid waste management system pursuant to the RFP. To distinguish between SWISC and the permanent management structure, the permanent management structure is hereinafter called the "Authority".

Several options for ownership and/or operation of the system(s) and facilities will be considered in order to choose the option which is considered to be in the best interests of the Participating Municipalities. One important factor in the choice of system(s) will be the degree of overall ownership or control vested in the Participating Municipalites or controlling public body (SWISC successor). To assist SWISC in the evaluation of Responses relative to management options, the flexibility of the Respondents with respect to various options must be established, should they subsequently be awarded a contract pursuant to the RFP.

The Respondent shall state whether it is willing to submit a Proposal and subsequently contract with the Authority to provide the facilities described in its Response with respect to each of the four options described below.

The Respondent must clearly state if any one or more of the options would not be available to the Authority with respect to any of the facilities described in the Response.

In addition, the Respondent may propose variations to such options.

7.2 Option 1 - Full Ownership and Responsibility for Operation of the Waste Management System by the Authority

This option would require that the Contractor obtain all approvals for the preferred system, with assistance from the Authority as defined; construct the system; place the system in operation; and demonstrate to the satisfaction of the Authority that the system had been constructed and was operating in compliance with the Authority's specifications.

The Contractor would then transfer full ownership and responsibility for the system to the Authority.

In this case, the RFP (not the Expression of Interest) would require the following information in addition to the information required in Section 7.5:

(a) The lump sum cost to the Authority for the waste management system, with a full description of what is included in the cost.

(b) If the proposed system contained components, such as transportation systems, which could not be acquired by the Authority, the bidder would submit the costs to the Authority for continued use of these components on a contractual basis throughout the life of the proposed system. This cost would be based on initial costs with a procedure for future adjustments.

(c) The cost to the Authority for the Contractor to train the Authority's staff to take over and operate those components of the system which would be owned by the Authority.

(d) The cost to the Authority for the Contractor to continue to operate the total system on a contractual basis.

(e) The cost to the Authority for the Contractor to continue to operate only one or more components of the system.

7.3 Option 2 - Shared Ownership and Responsibility for Operation of the Waste Management System By the Contractor and Authority

This option would provide for a joint venture between the Contractor and the Authority to optimize the strengths of each in the ownership and operation of the system.

Each would own 50% of the system and an arbitration board would be established to resolve any disputes.

The Contractor and the Authority would each contribute 50% of the capital, operating and long-term care costs.

Agreement would be made on the fair return to each of their costs and investments.

The venturers would obtain necessary approvals, and call contracts for construction and operation on a competitive basis.

In this case, the RFP (not the Expression of Interest) would require the following information in addition to the information required in Section 7.5:

(a) the capital, operating and long-term care costs to be shared by the Contractor and the Authority.

(b) details of the basis proposed to ensure a fair return to each venturer of their costs and investments.

(c) a description of these aspects of the system which the Contractor believes would best utilize its strengths for operation and long-term care.

7.4 Option 3 - Authority to Lease (With Option to Purchase) the Proposed System from the Contractor

This option is intended to allow the Authority to staff and operate the system with public employees to the maximum extent possible and to acquire ownership of the system at a future

date.

In this case, the RFP (not the Expression of Interest) would require the following information in addition to the information required in Section 7.5:

(a) Rent payable by the Authority to lease the system from the start of operations acceptable to the Authority for a period of 10 years and 20 years.

(b) Rent payable by the Authority to lease the proposed system from the start of operations acceptable to the Authority for a term of 5 years with the option to purchase the system at a specified purchase price at the end of the 5 year term.

To the extent that any components of the system could not be purchased by the Authority, the cost of continued leasing of such components shall be particularized.

7.5 Option 4 - Full Ownership and Responsibility for Operation of the Waste Management System by the Contractor

The Contractor would be fully responsible for all costs to obtain approval of the system, (excluding costs defined as those of the Authority as a Co-Proponent for EAA and other pertinent approvals); capital costs; operating costs; closure costs; and costs of perpetual care.

The Contractor would retain full ownership of the system and be reimbursed by the Authority on the basis of the contracted price per tonne of solid waste delivered to the system.

In this case, the RFP (not the Expression of Interest) would require the following information:

(a) the price per tonne for all solid waste delivered to the system as stipulated by the Authority. The quantities of wastes would include wastes generated in the GTA whether delivered by municipal or private sector collectors and haulers.

(b) supporting information with respect to the derivation of the cost per tonne by each activity and component of the system including capital and operating costs, financing charges, administration, overhead and profit.

(c) the base year for all costs and the annual inflation rate to be assumed for operating costs will be specified.

(d) the Provincial and Federal Sales Taxes included.

(e) projected revenues from the sale of products from the system.

(f) financial information, describing the source of financing, guarantees of financial stability, liability insurance and bonding.

(g) procedures for auditing, resolution of disputes, and basis for adjustment in payments will be specified.

8.0 EXPERIENCE OF RESPONDENT

In order to assist SWISC in determining the capability and responsibility of each Respondent, the Respondent shall complete the following statement sheets which are bound herein.

Statement "A" - If the Respondent is a corporation, or if the Respondent is a partnership, joint venture or other group and any member thereof is a corporation, provide the information on the organization and ownership of each such corporation and on any corporate shareholder of each such corporation.

Statement "B" - Describe the general experience of the Respondent in similar work which it has successfully completed. In the case of a joint venture, describe pertinent experience of each of the Respondent's principals or venturers with respect to the portion of the work for which they would be responsible, and any previous work carried out as a joint venture.

Statement "C" - Provide a list of specific experience of the Respondent in similar work which it has successfully completed with respect to each major component of the proposed system.

If the Respondent prefers, it may, in lieu of completing and submitting the attached statement sheets, submit the information required by the said sheets on similar forms prepared in its own office, provided that the said forms bear the Respondent's name and date of preparation and contain up-to-date information.

STATEMENT "A"

ORGANIZATION AND OWNERSHIP OF CORPORATION

NAME OF CORPORATION: _____

JURISDICTION OF INCORPORATION: _____

DATE OF INCORPORATION: _____

REGISTERED OFFICE ADDRESS: _____

DIRECTORS:

Name	Address	Date Appointed

OFFICERS:

Office	Name	Address	Date Appointed

SHAREHOLDERS:

Name	Address	Percentage of Voting Shares Held

STATEMENT "B"

GENERAL EXPERIENCE OF RESPONDENT

The Respondent will submit a summary of its general experience in successfully completed similar projects giving the following information:

1. If the Respondent is a single Municipality or Person:

   Name under which similar work carried out:

   _____

Year	Owner	Value of The Work	Description of the Work

2. If the Respondent is a Joint Venture, please complete the following for each member of the Joint Venture:

Name of Member of Joint Venture: _____

Name under which similar work carried out:

_____

Year	Owner	Value of The Work	Description of the Work

STATEMENT "C"

SPECIFIC EXPERIENCE OF RESPONDENT

The Respondent will submit a summary of its specific experience with respect to each key component of its proposed system in successfully completed similar projects giving the following information. If a listed component (see Section 6) is not part of the proposed system please mark "N/A". Add any additional key components required for the Respondent's system and provide the same information.

Component	Name Under Which Work Carried Out	Year	Owner	Value of the Work	Description of the Work
1. Addition to the Participating Municipalities' Diversion Programs.					

STATEMENT "C", cont'd

Component	Name Under Which Work Carried Out	Year	Owner	Value of the Work	Description of the Work
2. Waste Receiving Facility(ies)					

STATEMENT "C", cont'd

Component	Name Under Which Work Carried Out	Year	Owner	Value of the Work	Description of the Work
3. Waste Transportation System					

STATEMENT "C", cont'd

Component	Name Under Which Work Carried Out	Year	Owner	Value of the Work	Description of the Work
4. Processing Facility(ies)					

STATEMENT "C", cont'd

Component	Name Under Which Work Carried Out	Year	Owner	Value of the Work	Description of the Work
5. Disposal Facility(ies)					

STATEMENT "C", cont'd

Component	Name Under Which Work Carried Out	Year	Owner	Value of the Work	Description of the Work
6. Research Facility(ies)					

STATEMENT "C", cont'd

Component	Name Under Which Work Carried Out	Year	Owner	Value of the Work	Description of the Work
7. Other Key Component(s)					

9.0 EVALUATION OF EXPRESSIONS OF INTEREST

This section describes the procedures for submission and receipt of Responses and for Evaluation of Responses.

9.1 Delivery and Opening of Responses

Responses shall be submitted in sealed packages clearly marked either:

- o "Expression of Interest for Long-term Solid Waste Management System"; or
- o "Expression of Interest for COMPONENTS for a Long-term Solid Waste Management System."

and will be received by SWISC, at the location stated in the Expressions of Interest advertisement until 3:00 p.m. Toronto time on the advertised Closing Date. On receipt, the package will be marked by the designated representative of SWISC with the time and date the package is received. The use of the mails or courier for delivery of a Response will be at the sole risk of the Respondent and no consideration will be given to Responses received after the advertised Closing Date.

Under no circumstances will Responses be considered which are received after 3:00 p.m. Toronto time on the advertised Closing Date.

On the Closing Date, commencing at 3:15 p.m. Toronto time, the packages will be opened, identified, and recorded publicly by the designated representative of SWISC in the location stated in the advertisement.

One unbound original, and thirty (30) copies, of each Response shall be submitted. Additional copies may be requested.

9.2 Withdrawal of Responses

A Respondent who has already submitted a Response may submit further Responses at any time up to the Closing Date. The last Response received shall supersede and replace all other similar Responses previously submitted by that Respondent.

A Respondent may withdraw or qualify its Response at any time up to the Closing Date by submitting a letter bearing its signature and seal, if available, as in its Response to be delivered to SWISC. Such a submission at the location stated in the Request for Expressions of Interest advertisement must be received in sufficient time to be marked with the time and date before 3:00 p.m. on the Closing Date. The Respondent shall show its name, and the designation of the Response on the package containing such letter.

9.3 Procedure for Evaluation of Responses

The Responses will be passed by SWISC to the Technical Committee for evaluation. The Technical Committee will have the Responses evaluated in accordance with the criteria described in Section 9.4. If the Technical Committee requires additional information, it will request that SWISC arrange to obtain such additional information from the Respondent(s) in writing.

As soon as practicable after receipt of such additional information, the Technical Committee will complete its evaluation of all reasonable alternatives for the long-term solid waste management systems and facilities including the material submitted in the Responses; the plans of the Participating Municipalities; and any other reasonable alternatives, to determine the preferred long-term systems. These preferred systems will form the basis for preparation of draft RFPs to provide the preferred system(s).

The Technical Committee will submit a report to SWISC on its analysis and recommendations, with reasons therefor. Upon the approval of SWISC to release the report, a copy will be mailed to all Respondents. In addition, public consultation on the report and draft RFPs will be initiated.

Following input from all interested parties, the RFPs will be finalized and issued to those Respondents selected by SWISC (or the Authority). If, in the examination of alternatives submitted in the Responses, it is found that a viable alternative was not included, then an open Request for Proposals would be issued for that particular alternative.

9.4 Criteria for Evaluation of Responses

SWISC will examine a reasonable range of alternative solutions to the long-term management of solid waste in the GTA. This examination will include alternatives identified in Responses, regional waste management master plans and any other reasonable alternative identified by the Technical Committee or its consultants. The advantages and disadvantages to the environment of individual components and various combinations of these components will be evaluated using a net effects analysis to select a preferred system or systems.

Respondents have the option of submitting on the entire long-term waste management system or on one or more components of the system. Separate sets of preliminary evaluation criteria have been developed for each option.

A long-term system will be evaluated on its systems aspects first (Section 9.4.1) and then its components will be evaluated as part of the component evaluation analysis (Section 9.4.2).

In the evaluation process, Responses must meet certain mandatory criteria. Those Responses meeting these mandatory criteria will be further evaluated using comparative criteria; which are described in the following section to assist Respondents. It must be noted that as indicated in Section 4.5 these criteria will be evaluated by the public and that any resulting changes will be forwarded to the Respondent in Addendum reports. A detailed evaluation process will be undertaken on the basis of the final version of the comparative criteria.

9.4.1 Long-term Waste Management System

Mandatory Criteria

- The Respondent must demonstrate how it aims to fulfill the 50% target for diversion of waste from disposal by the year 2000, either through extension of the Regional systems and/or

through the provision of new facilities.

- The Respondent must demonstrate that the proposed methods or processes have been operated successfully at a scale which would render them suitable for the GTA system.

Methods or processes which are still in the experimental or pilot stages will only be considered for inclusion under the proposed Research Facility and Demonstration Project. Consideration would be given in the selection of preferred alternative systems to the ability of such systems to incorporate promising methods or processes once these systems have been proven.

Comparative Criteria

Section 2 outlines a set of six principles which SWISC has proposed for the long-term system. The following comparative criteria have been developed to evaluate compliance with the first five principles. The sixth principle involves costs and will not be evaluated as part of the Expressions of Interest.

Principle 1 - *To aim at fulfilling provincial targets for diversion of solid wastes from disposal.*

Comparative Criteria

- Respondent demonstrates a significant advantage over other respondents for additional percentage of wastes which are diverted from disposal; priority will be given to "reduction" of wastes.

- Reliability of markets proposed for materials diverted.

- Net benefits to the Province of the proposed system, for example, through development of local and/or export markets.

- Contribution to Regional Development.

- o Flexibility with respect to future technological and market developments.

Principle 2 - *To develop a system based on proven technology for processing solid wastes which will eliminate objectionable characteristics associated with some traditional waste management systems and which meets the requirements for approval under the EAA, EPA and other pertinent statutes.*

Comparative Criteria

- o Demonstrates a significant advantage over other Respondents in the use of more advanced alternatives for solid waste management which have been proven to be applicable to the GTA.

- o Period of time when the proposed system is potentially viable.

- o Flexibility with respect to future technological developments.

Principle 3 - *To construct an innovative framework for new research and development in the area of solid waste reduction, re-use, recycling and recovery.*

Comparative Criteria

- o Characteristics of proposed system which provide for new research and development opportunities in reduction, re-use, recycling, recovery and other aspects of solid waste management. This would include flexibility to build on local initiatives as well as provision of a specific research facility(ies).

- o Is the framework likely to produce results in the short-term (5 years) or long-term or both?

Principle 4 - *To locate facilities, if possible, in receptive communities and maximize industrial development opportunities for those communities.*

Comparative Criteria

- Inclusion of a willing and appropriate host community(ies) for the proposed facilities.
- Type of industrial development and its suitability for, and synergies with, the host community(ies).
- Number and type of jobs created in the host community(ies).
- Requirement for new infrastructure relative to capabilities of host community(ies).

Principle 5 - *To create a waste management structure that will allow maximum collaborative efforts between municipal, regional, provincial and federal authorities; which best combines the efforts of the public and private sectors; and which serves as a world class model for environmentally sound waste management systems.*

Comparative Criteria

- The options available for Ownership and Operation of System(s) and Facilities (Section 7) including the flexibility of Respondents to consider collaborative efforts in ownership and operations. As indicated in Section 7, an important factor in the choice of System(s) and/or Facilities will be the degree of overall ownership or control vested in the Participating Municipalities or controlling public body (SWISC successor).
- Suitability of preferred alternatives for collaborative efforts.
- Provision of facilities which may be implemented prior to completion of the long-term system which may or may not become part of the long-term waste management system but which would assist SWISC in the provision of contingency facilities.

9.4.2 Components of a Long-term Waste Management System

Mandatory Criterion

- Respondent must demonstrate that the proposed process has been operated successfully at a scale which would render it suitable for the GTA system.

Comparative Criteria Common To All Components

The following criteria will be used in the evaluation of all components of a waste management system.

- Extent of advanced technology used.
- Generic potential environmental impacts; mitigation measures proposed; and net effects on the environment (using the broad definition of the environment in the EAA).
- Flexibility of the component to incorporate future developments.
- Flexibility of Respondent with respect to incorporating component in preferred system.
- Proposed location(s) of the components and status of acceptability to the host community or Province or Federal Government if located on Provincial or Crown lands (see Section 6.4).
- Lands and services which would have to be acquired in addition to those already owned by the Respondent .
- Status of component with respect to approvals to construct and operate.
- Anticipated life of component.
- The maintenance and safety programs which would be required for the component.

- o The monitoring required for the component to ensure satisfactory operation, in addition to monitoring by the Regulatory Authorities.

- o The amount and type of employment opportunities and the locations for such opportunities.

- o Labour requirements and locations.
- o The end-use, perpetual care and/or close-out conditions for the component.

- o Time required for construction and implementation following receipt of all necessary approvals.

- o The contingency plans:
  - in the event that a component is not ready for operation in accordance with the schedule for the overall system.
  - in the event of failure of the proposed component due to weather; labour problems; mechanical difficulties; basic design, etc.

Comparative Criteria Specific to Individual Components

In addition to the comparative criteria common to all components, the following comparative criteria will be used to evaluate each, individual component. Each component is referenced in Section 6.

Addition to the Participating Municipalities' Diversion Programs (Section 6.2.2).

- o Percentage diversion by year, to the year 2000 and beyond, if applicable. Preference will be given to submissions which can demonstrate that higher percentage diversions will be achieved earlier.

- o Proven reliability and experience with proposed facility and ability to meet diversion targets.

- o Type of End Products and marketability.

Receiving Point(s) for Waste from Participating Municipalities (Section 6.2.3):

- suitability of receiving points with regard to existing and future operations in the GTA.

- any conditions stipulated with respect to delivery of wastes by the Participating Municipalities.

Receiving Facility(ies) (Section 6.2.4):

- manner in which wastes are to be received relative to Participating Municipalities' capabilities.

- the type and reliability of the receiving and processing components.

- use of existing facilities.

Transportation to Processing/Disposal Facility(ies) (Section 6.2.5)

- complexity of the system.

- suitability with respect to existing transportation systems.

Processing Facility(ies) (Section 6.2.6)

- Percentage diversion by year, to the year 2000 and beyond, if applicable. Preference will be given to submissions which can demonstrate that higher percentage diversions will be achieved earlier.

- Proven reliability and experience with proposed facility and ability to meet diversion targets.

- Type of End Products and marketability.

Disposal Facility(ies) (Section 6.2.7)

- extent of site investigations already carried out which substantiates viability of facility.

Research Facility(ies) and Demonstration Projects (Section 6.2.8)

- appropriateness to objectives of SWISC and preferred system.
- location of facility (preference may be given to location in a host community for the disposal facility(ies)).